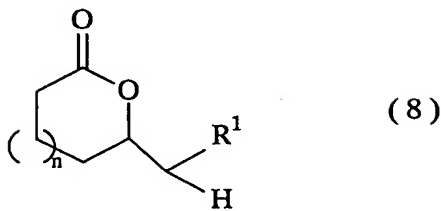
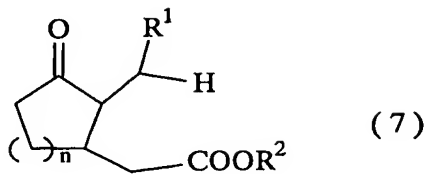
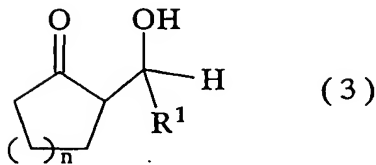
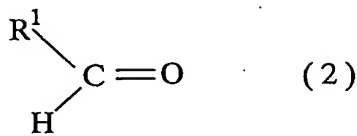
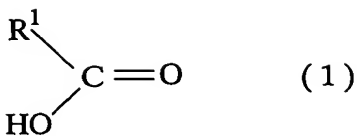


ABSTRACT

The present invention provides a process for producing 2-(1-hydroxyalkyl)cycloalkanone and/or 2-(1-hydroxyaryl)cycloalkanone in high yield and selectivity, as well as a process using the same to produce a cycloalkanone derivative useful as a perfume material and a physiologically active substance. Disclosed is a process for producing compound (3), which includes subjecting a cycloalkanone, and aldehyde (2) containing carboxylic acid (1), to aldol condensation in the presence of water and a basic catalyst, wherein the molar amount (referred to hereinafter as A) of the basic catalyst added is not less than the molar amount (referred to hereinafter as B) of the carboxylic acid (1) contained in the aldehyde (2) and the difference between A and B, that is, $(A - B)$ is 0.06 mol or less per mol of the aldehyde (2), as well as a process for producing compounds (7) and (8) by using the compound (3) obtained by the above process.



wherein n is an integer of 1 or 2, R¹ represents H or a C1 to C8 alkyl group or the like, and R² represents a C1 to C3 alkyl group.